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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/029,917	12/21/2001	Jay Dee Krull	1528.008US1	5913

7590

04/14/2003

DEVON A. ROLF  
C/O GARMIN INTERNATIONAL, INC.  
1200 151ST STREET  
OLATHE, KS 66062

EXAMINER

NGUYEN, TAN QUANG

ART UNIT

PAPER NUMBER

3661

DATE MAILED: 04/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/029,917

Applicant(s)

KRULL ET AL.

Examiner

TAN Q NGUYEN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2, 3. 6) ☐ Other: \_\_\_\_\_

## DETAIL ACTION

### *Notice to Applicant(s)*

1. This application has been examined. Claims 1-42 are pending.
2. In the flow chart of figure 7, the steps 720 and 740 is unclear as to there is indication of the direction flow (Yes/No indication). Correction is required.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).
5. Claims 1-4, 6, 8, 10-22, 24, 25 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abe (6,088,652) in view of Berstis (6,182,010).

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6. With respect to claims 1-4, 10, Abe discloses an electronic navigation aid device which includes a processor (see figure 1, item 1), a memory for storing cartographic data and route to a desired destination (see figure 1), a display for displaying cartographic data and an enlarge display of an intersection (a decision point) which the vehicle is approaching (see the abstract and figure 4).

7. Abe does not explicitly disclose that the enlarged display is an overlay screen on top of any presently display screen. However, such feature is well shown in at least figure 5 of the Berstis reference. It would have been obvious to one of ordinary skill in the to incorporate the teaching of Berstis into the system of Abe in order to superimpose the enlarge display of an intersection when the vehicle is approaching to the that intersection while maintaining the display of the planned route, thereby not only allow the driver to see the detail intersection but also see the overview the current status of the position of the vehicle.

8. With respect to claim 6, Berstis does disclose that marker at the enlarge image for the driver to know the current status of the vehicle (see at least figure 5, item 96).

9. With respect to claim 8, Abe disclose that the system includes the current vehicle is checked regularly to see when the vehicle is approach to the intersection (see at least figure 4, steps 46-52).

10. With respect to claims 11 and 12, Abe further discloses that the detail intersection is displayed based on the speed of the vehicle (see at least the abstract).

11. With respect to claim 25, Abe does disclose GPS for detecting the position of the vehicle (see at least column 6, lines 51-54).

12. With respect to claims 13-22, 24 and 27, the limitations of these claims have been noted in the rejection above and in the references above. They are therefore considered rejected as set forth above.

13. Claims 5 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abe and Berstis as applied to the claims above, and further in view of Ito et al. (6,249,740).

14. Abe and Berstis disclose the claimed invention as discussed above except for the portion of the course is highlighted. However, Ito et al. do suggest the calculated route is highlighted to provide more clearly such route (see at least figure 9B and the related text). It would have been obvious to one of ordinary skill in the art to incorporate the teaching of Ito et al. into the system of Abe in order to provide more visual the detail of the course approaching the intersection.

15. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abe and Berstis as applied to the claims above, and further in view of Yokoyama (6,263,276).

16. Abe and Berstis disclose the claimed invention as discussed above except for the set of travel habits is stored in the memory. However, Yokoyama et al. suggest a communication navigation system which includes a driver route history memory area for storing travel habits (see at least the abstract and figure 1). It would have been obvious to one of ordinary skill in the art to combine the teaching of Yokoyama and Abe and Berstis in order to provide the system with the enhanced capability of reducing the route calculation time by taking the travel habits into account.

17. Claims 9 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abe and Berstis as applied to the claims above, and further in view of Kaneko (5,729,109).

18. Abe and Berstis disclose the claimed invention as discussed above except for the use of audio instructions to navigate along the route as well as through a course at

the decision point. However, such audio output for guiding the vehicle along the planned route and also toward the intersection as shown in at least the abstract and figures 2-9 of the Kaneko et al. It would have been obvious to one of ordinary skill in the art to incorporate the teaching of Kaneko et al. into the systems of Abe and Berstis to not only provide the visual guidance but also the audio guidance to driver to improve the navigation system.

19. Claims 28-33 and 35-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abe and Berstis as applied to the claims above, and further in view of Harada (6,052,645).

20. Abe and Berstis disclose the claimed invention as discussed above except for the use of server and the communication between the navigation system onboard the vehicle and the server. However, such limitation is shown in the Harada reference in at least the abstract and figures 1-5. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Abe system by incorporate the communication with the server in order obtain the detail map via the server, thereby reducing the required capacity of the onboard memory of the vehicle.

21. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abe, Berstis and Harada as applied to the claims above, and further in view of Yokoyama (6,263,276).

22. Abe, Berstis and Harada disclose the claimed invention as discussed above except for the set of travel habits is stored in the memory. However, Yokoyama et al. suggest a communication navigation system which includes a driver route history memory area for storing travel habits (see at least the abstract and figure 1). It would have been obvious to one of ordinary skill in the art to combine the teaching of

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Yokoyama, Abe, Berstis and Harada in order to provide the system with the enhanced capability of reducing the route calculation time by taking the travel habits into account.

***Conclusion***

23. All claims are rejected.
24. The following references are cited as being of general interest: Koizumi et al. (6,151,552) and Harada (6,061,003).
25. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Tan Nguyen, whose telephone number is (703) 305-9755. The examiner can normally be reached on Monday-Thursday from 5:30 AM-4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Cuchlinski, can be reached on (703) 308-3873.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

or faxed to:

(703) 305-7687, (for informal or draft communications, please label  
"PROPOSED" or "DRAFT")

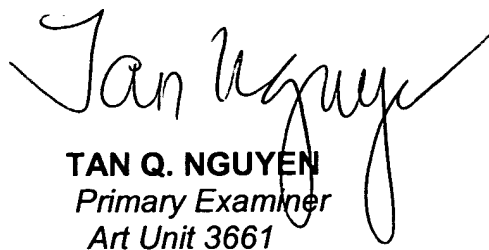
Hand-delivered responses should be brought to Crystal Park V, 2451  
Crystal Drive, Arlington, VA., Seventh Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-1113.

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/tqn  
April 4, 2003

  
**TAN Q. NGUYEN**  
*Primary Examiner*  
Art Unit 3661





**UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office**

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APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
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EXAMINER
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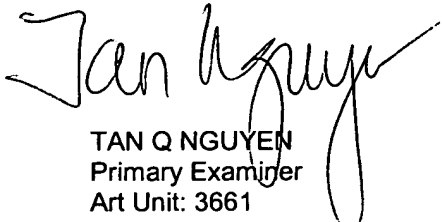
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**Commissioner of Patents and Trademarks**

  
TAN Q NGUYEN  
Primary Examiner  
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